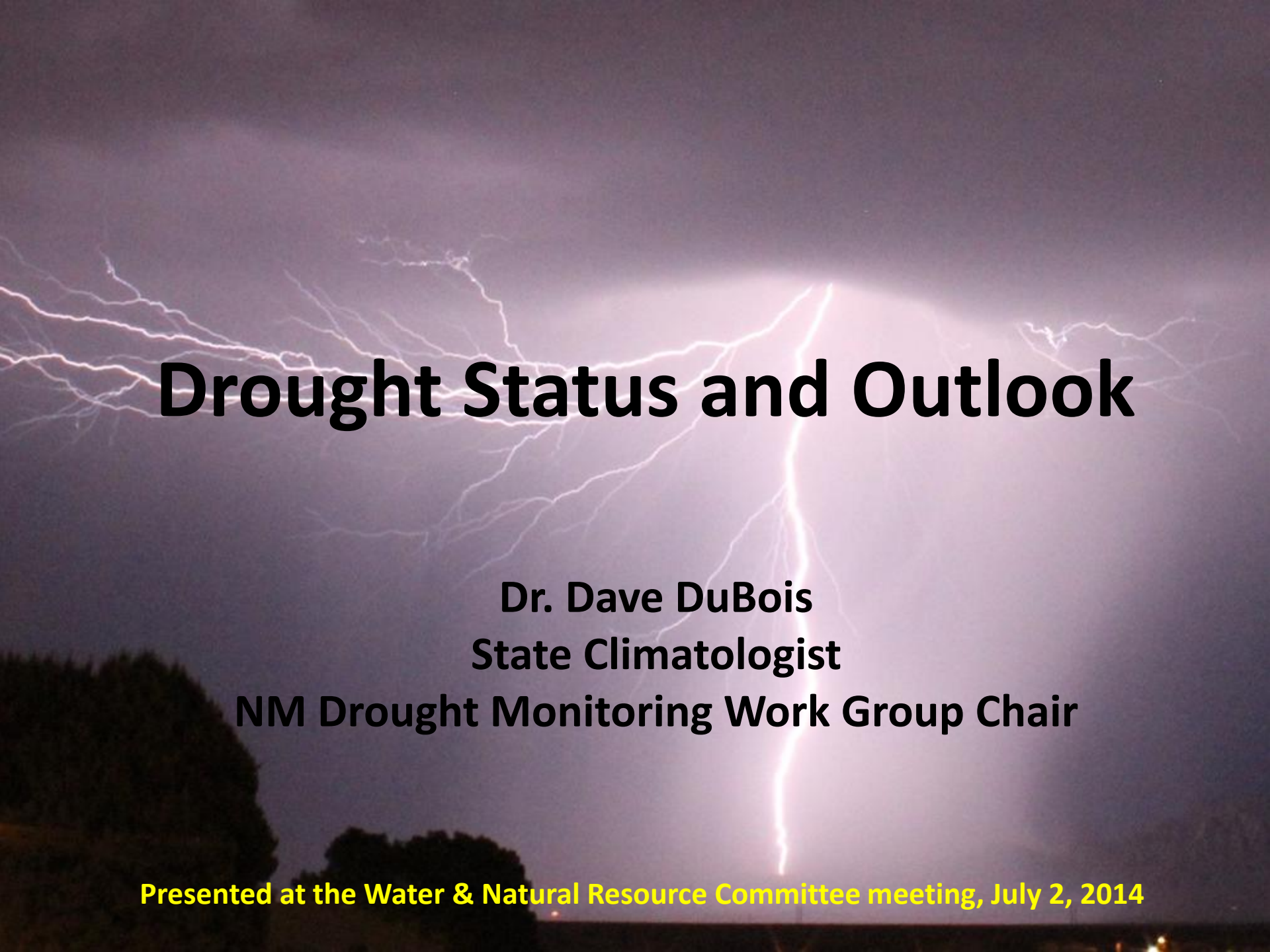


Drought Status and Outlook

Dr. Dave DuBois
State Climatologist
NM Drought Monitoring Work Group Chair

Presented at the Water & Natural Resource Committee meeting, July 2, 2014

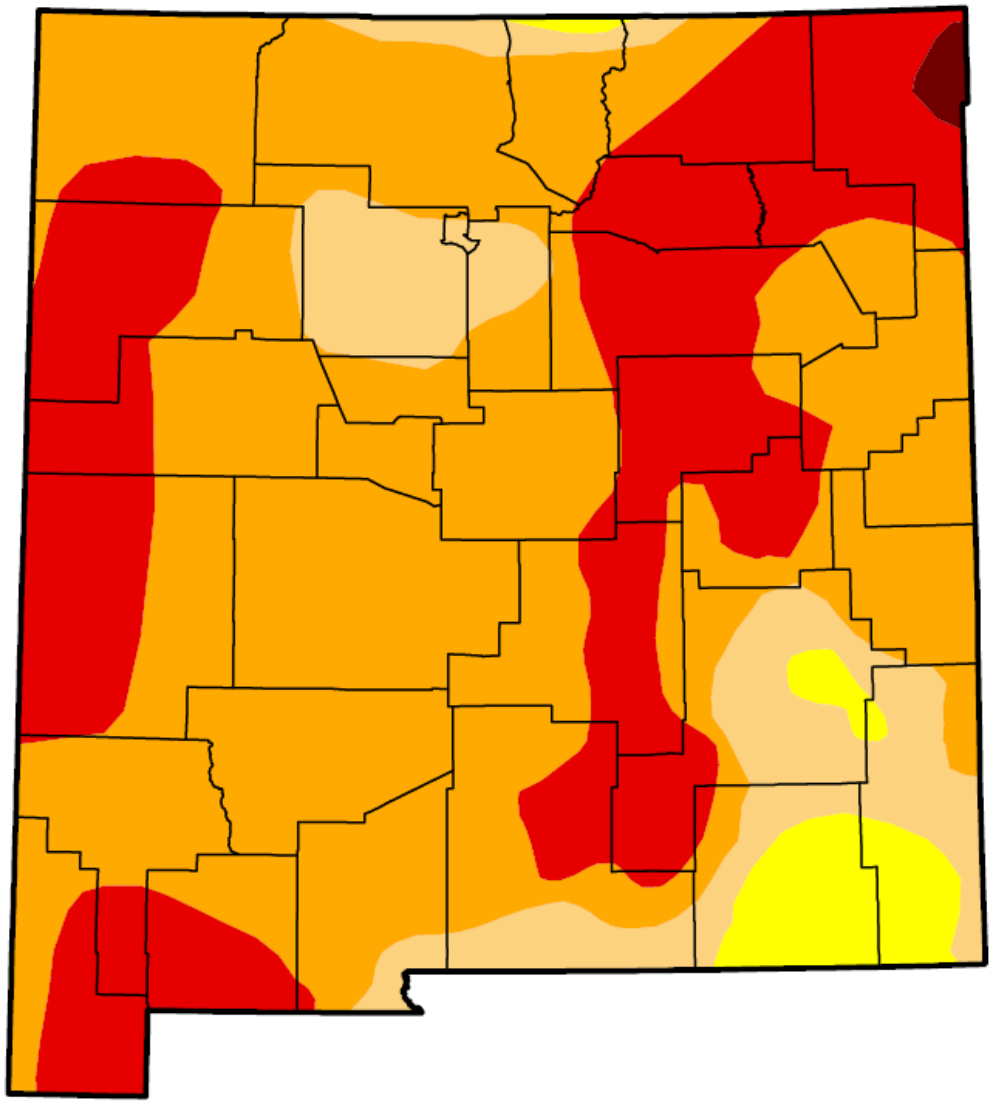
US Drought Monitor

Drought classification puts drought in historical perspective

DM Level	Name	Frequency
D0	Abnormally dry	3-5 years
D1	Moderate drought	5-10 yrs
D2	Severe drought	10-20 yrs
D3	Extreme drought	20-50 yrs
D4	Exceptional drought	50-100 yrs

U.S. Drought Monitor

New Mexico



June 24, 2014

(Released Thursday, Jun. 26, 2014)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	96.09	84.56	29.24	0.42
Last Week *6/17/2014*	0.00	100.00	96.09	84.56	29.24	0.42
3 Months Ago *3/25/2014*	0.49	99.51	97.49	65.09	24.56	0.00
Start of Calendar Year *12/31/2013*	0.39	99.61	75.21	32.68	3.96	0.00
Start of Water Year *10/1/2013*	1.66	98.34	74.92	37.81	3.39	0.00
One Year Ago *6/25/2013*	0.00	100.00	100.00	98.79	93.46	44.79

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

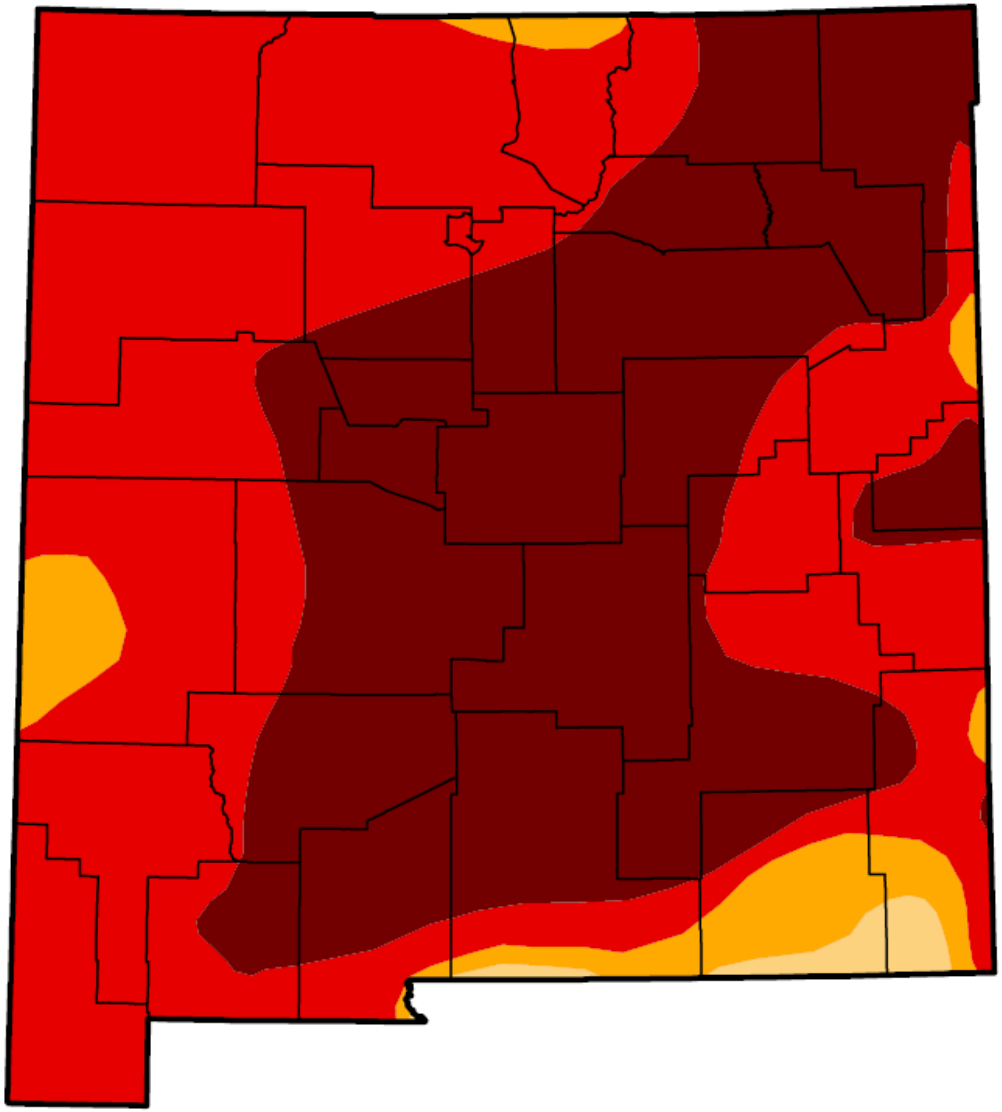
Author:
Eric Luebehusen
U.S. Department of Agriculture

USDA National Drought Mitigation Center

http://droughtmonitor.unl.edu/

U.S. Drought Monitor

New Mexico



June 25, 2013

(Released Thursday, Jun. 27, 2013)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	98.79	93.46	44.79
Last Week *6/18/2013*	0.00	100.00	100.00	98.49	90.18	44.13
3 Months Ago *3/26/2013*	0.23	99.77	98.47	89.85	49.97	4.36
Start of Calendar Year *1/1/2013*	0.00	100.00	98.83	94.05	31.88	0.97
Start of Water Year *9/25/2012*	0.00	100.00	100.00	62.56	12.25	0.66
One Year Ago *6/26/2012*	0.00	100.00	99.64	85.75	25.25	0.00

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

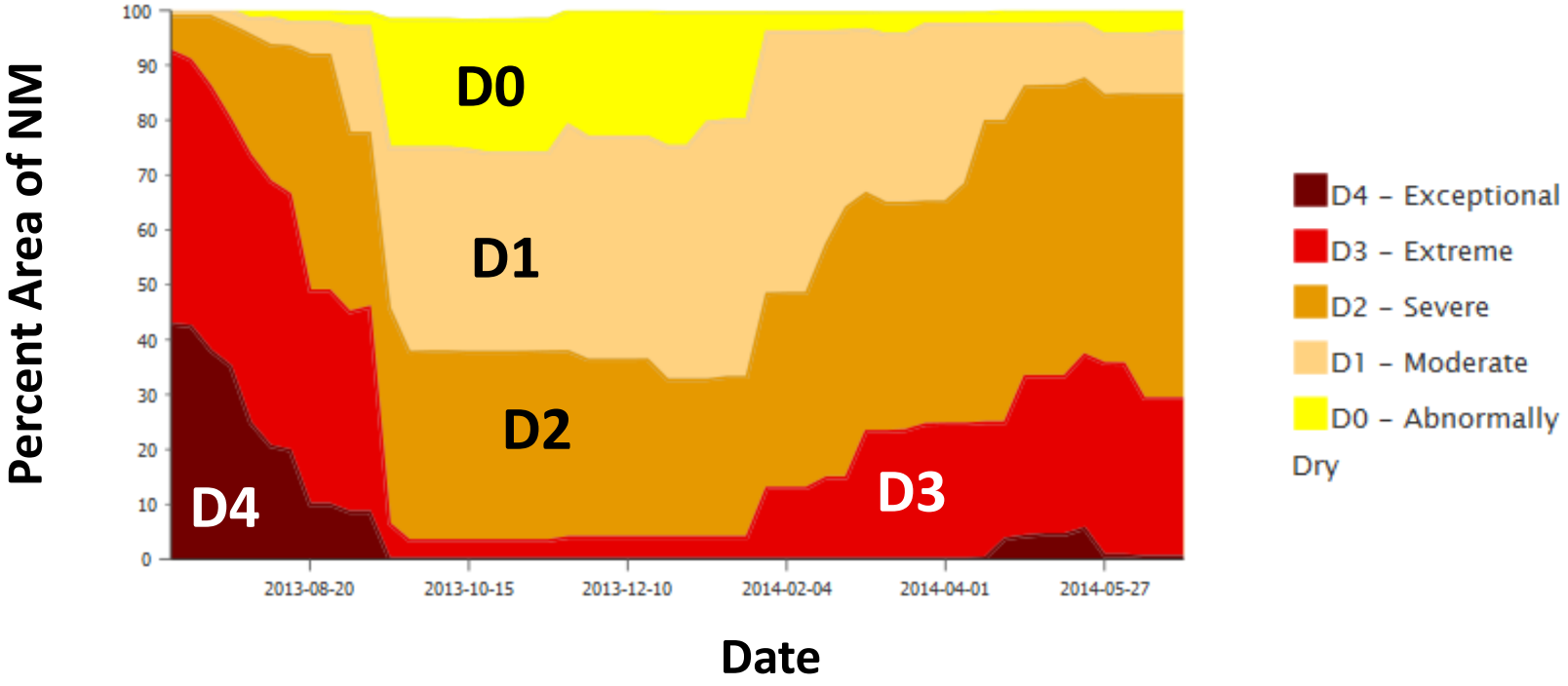
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Mark Svoboda
National Drought Mitigation Center

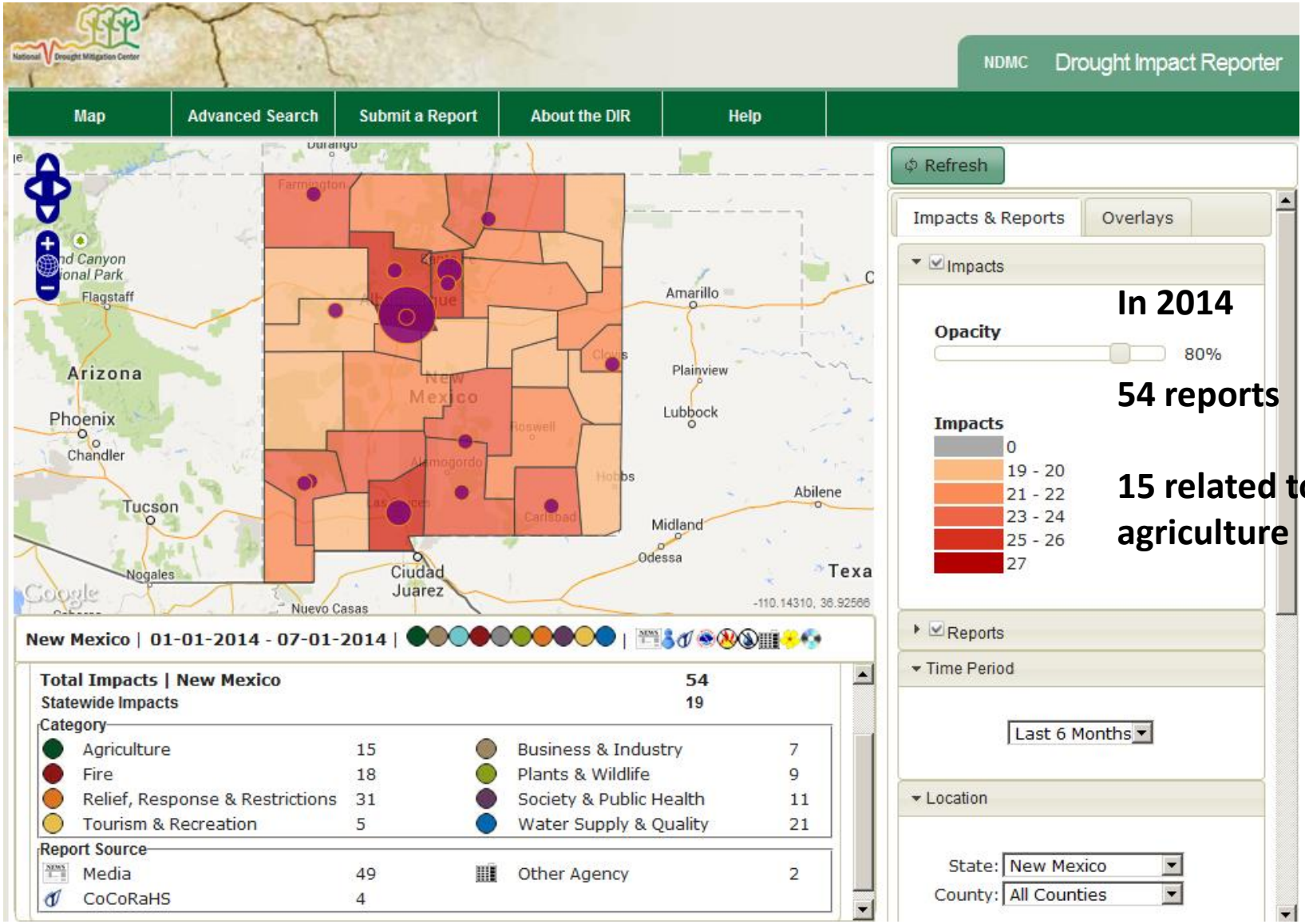
http://droughtmonitor.unl.edu/

Last 12-months in Drought Monitor

- Last year 93% in D3 & D4, this year 29%
- Currently <1% in D4 (last year 43%)
- Notice improvement last Sep. & redevelopment over this winter

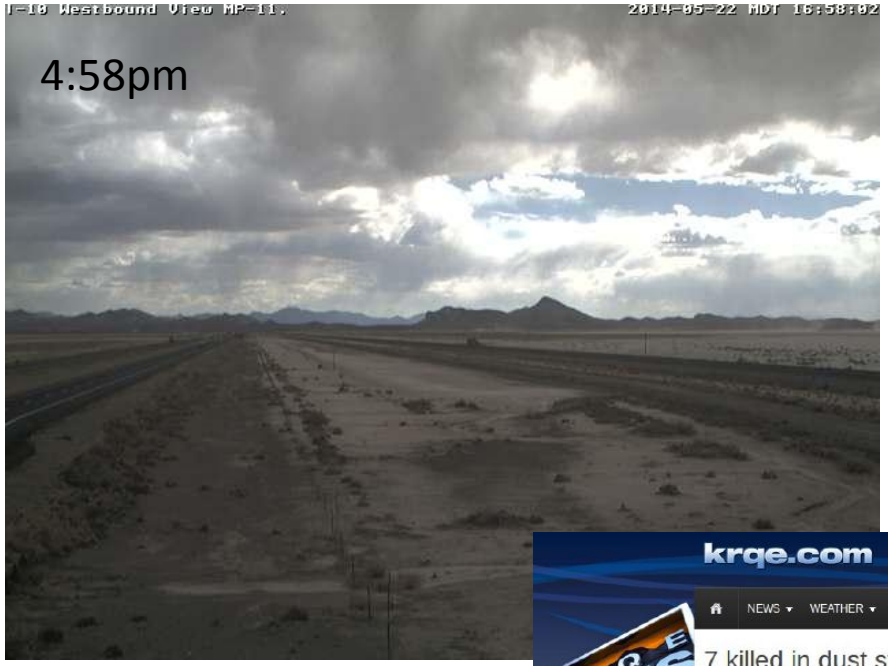


Drought Impacts from NIDIS

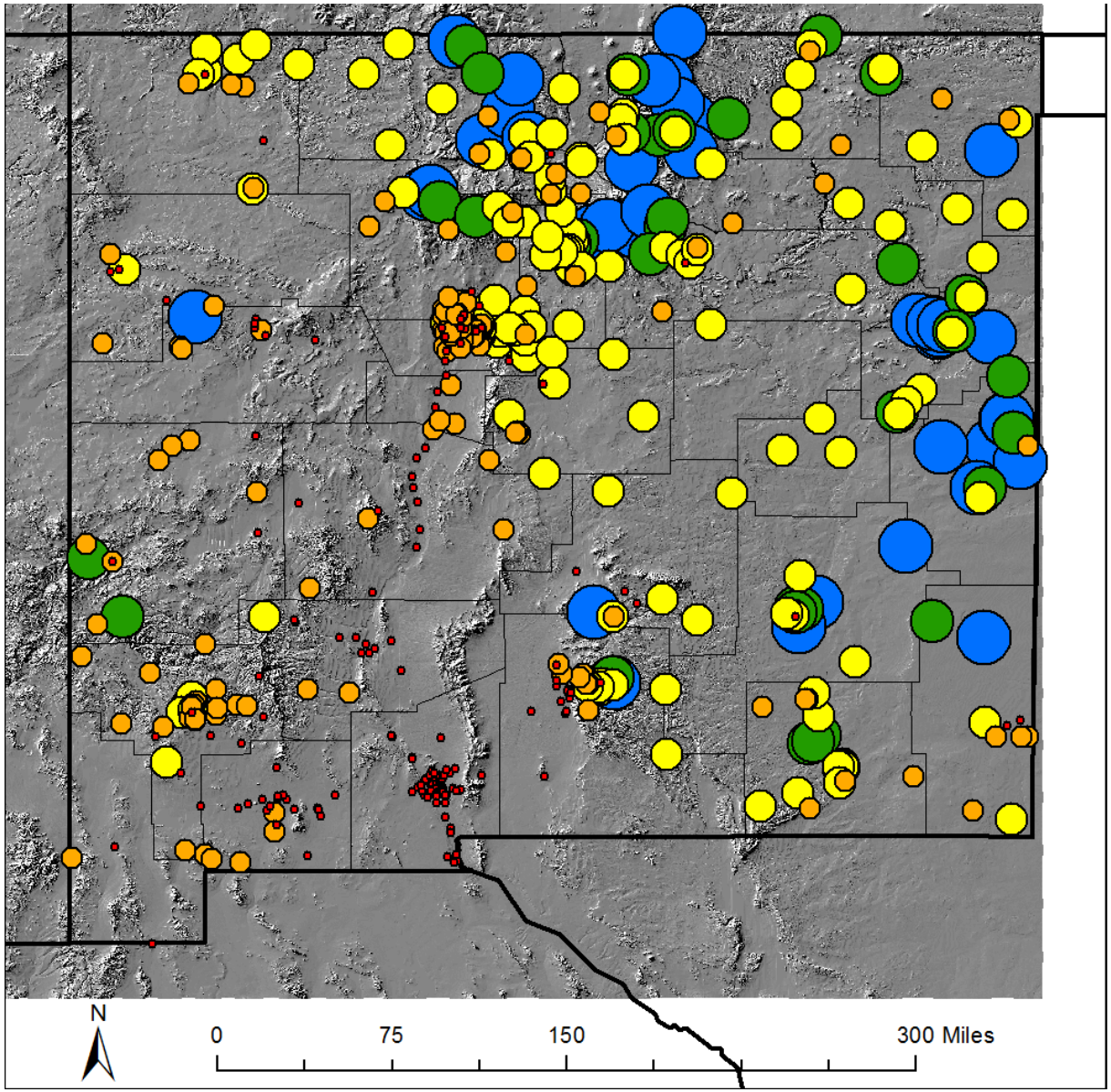


Dust Impacts

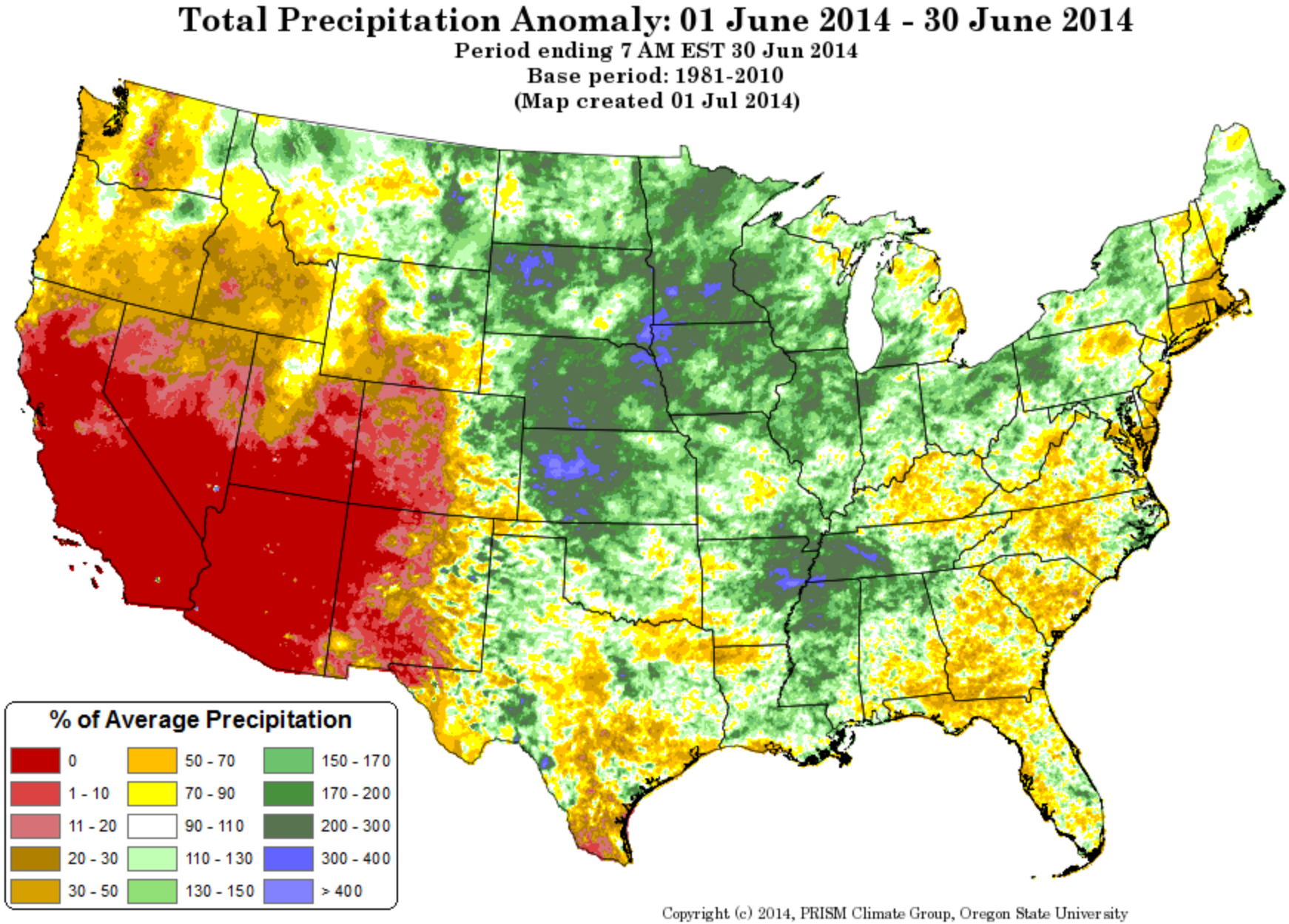
May 22, 2014



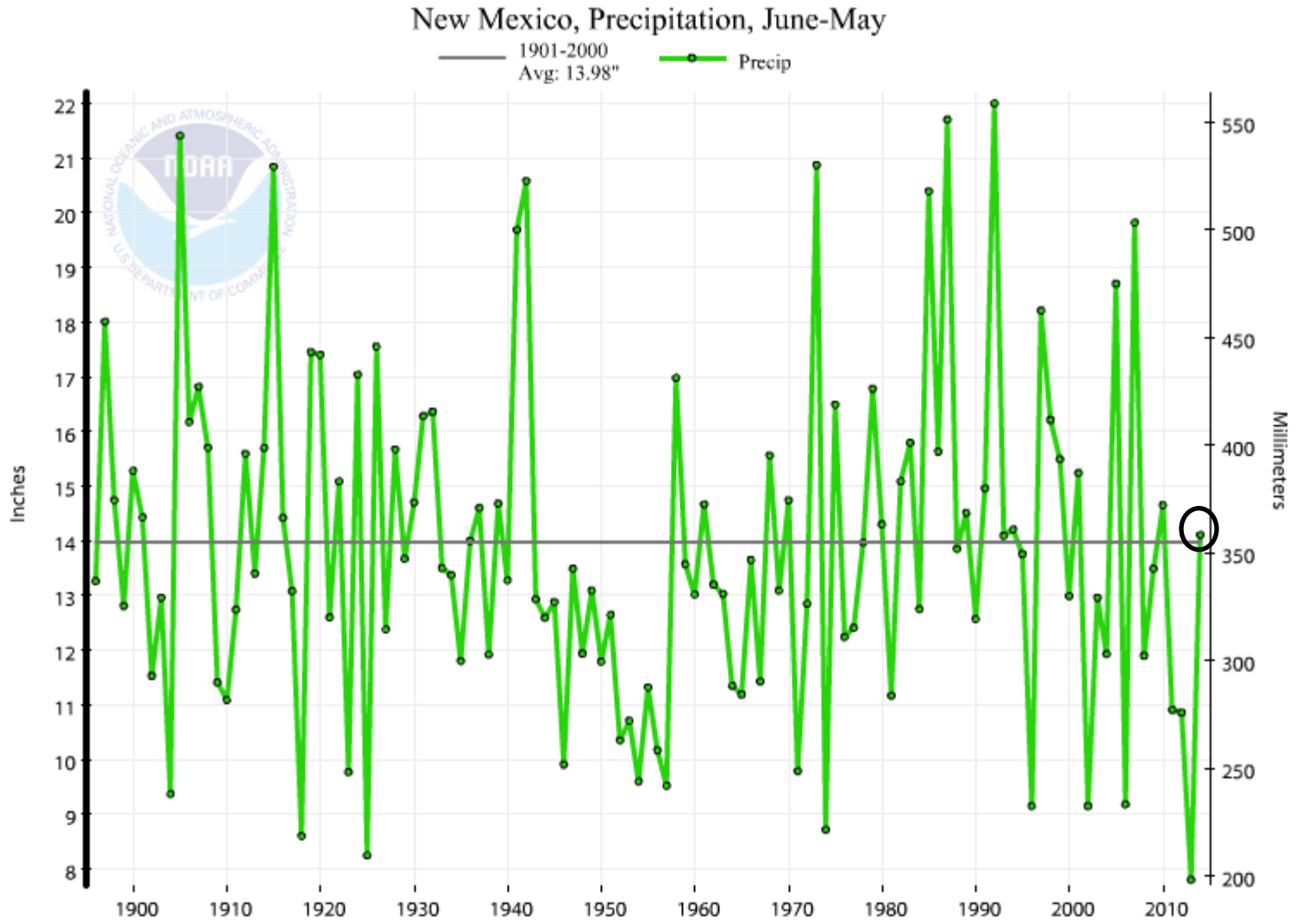
Year to Date Precipitation



June Precipitation

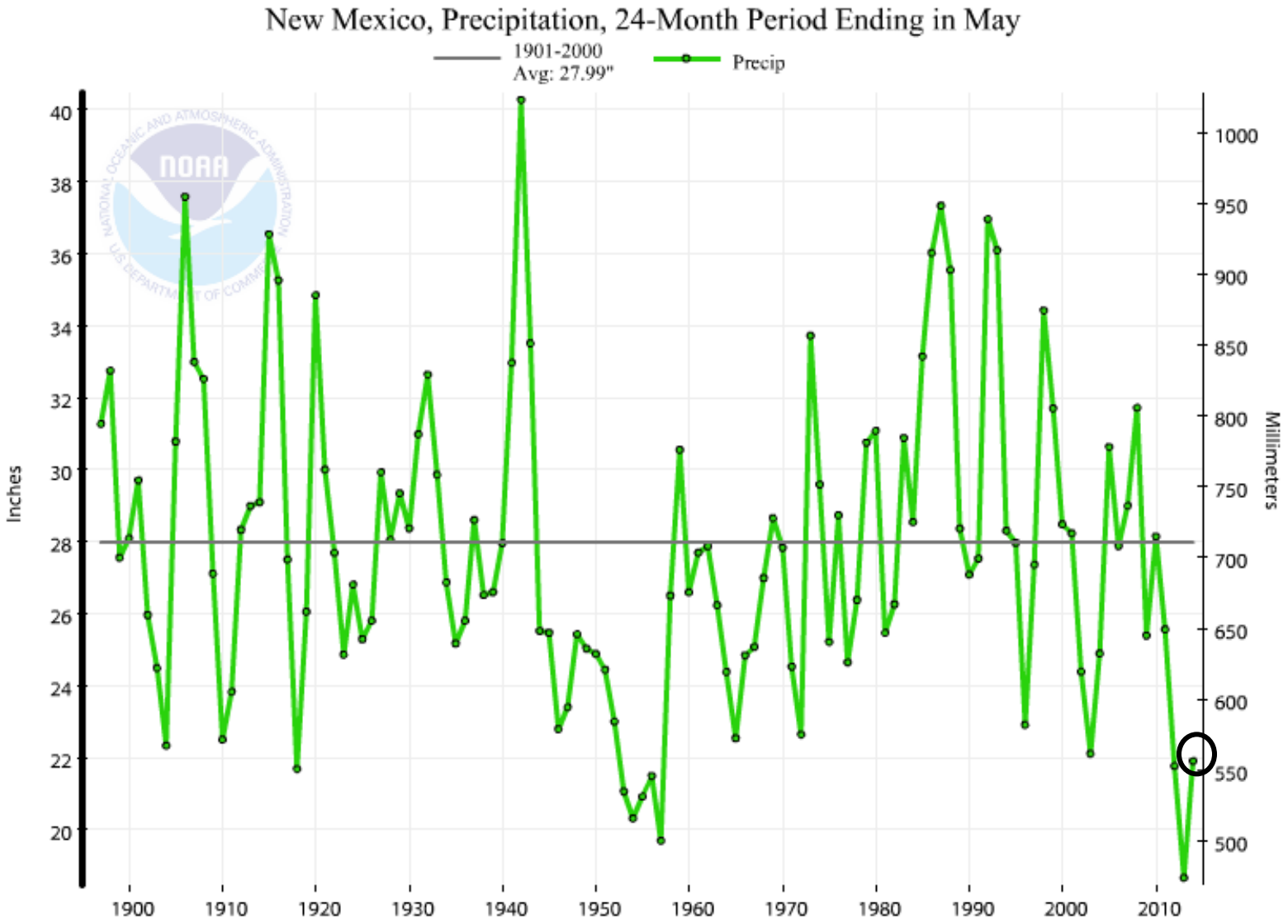


Last 12 Months (June 2013 – May 2014)
NM Precipitation Rank (70th driest: +0.13" !!!)

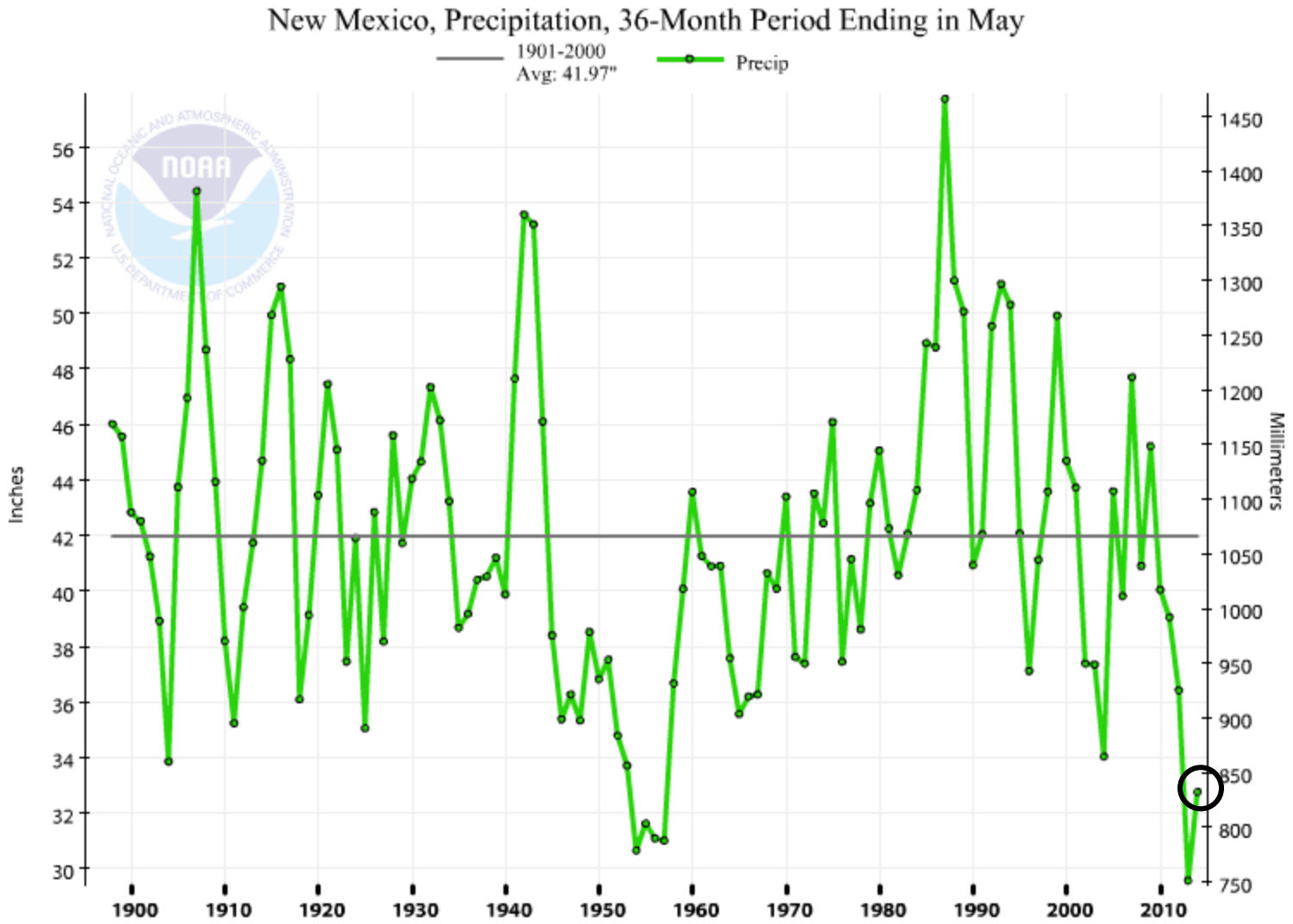


July & September 2013 combined for 55% of this 12 month period

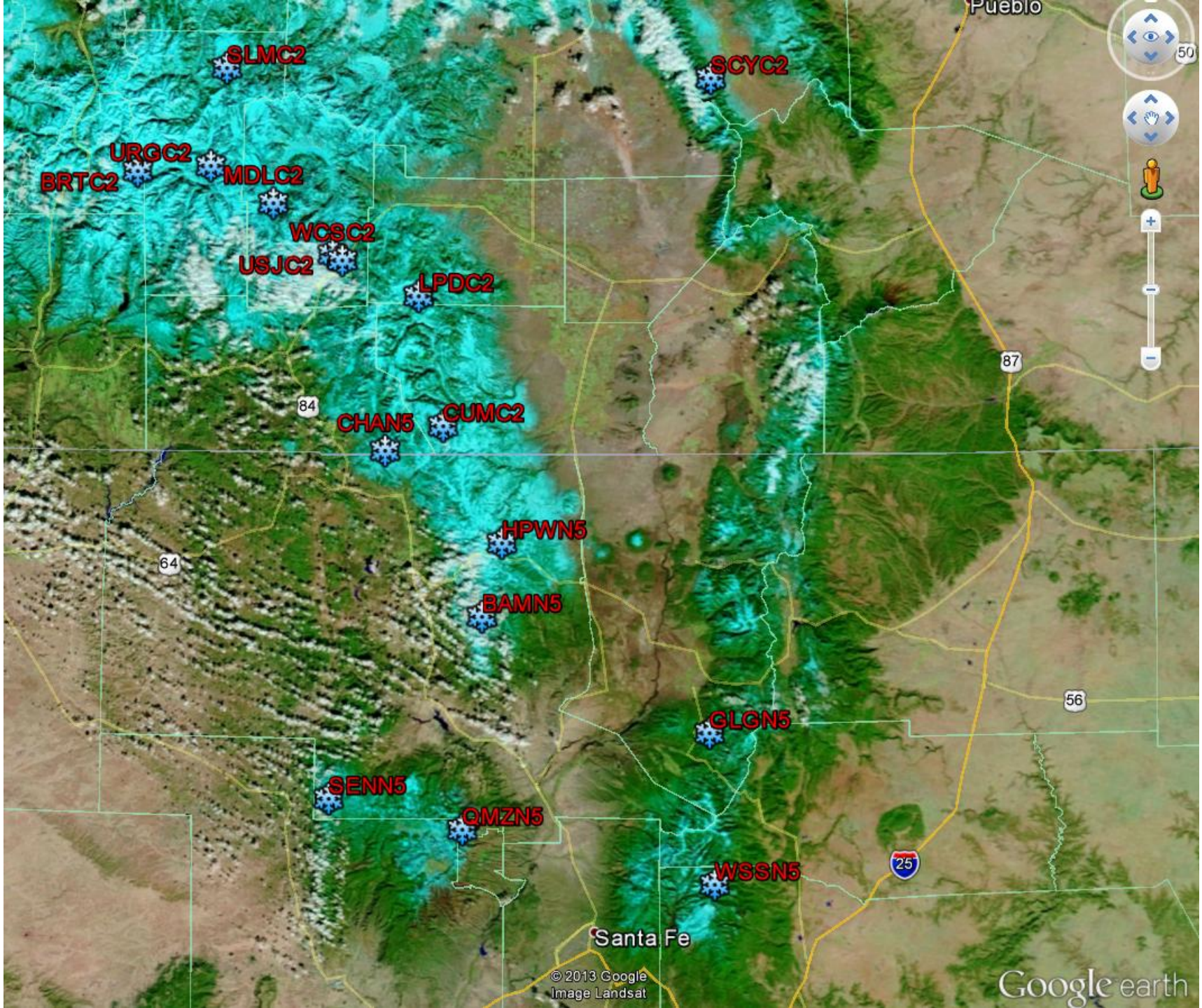
24 Month (June 2012 – May 2014)
NM Precipitation Rank (9th driest: -6.08”)



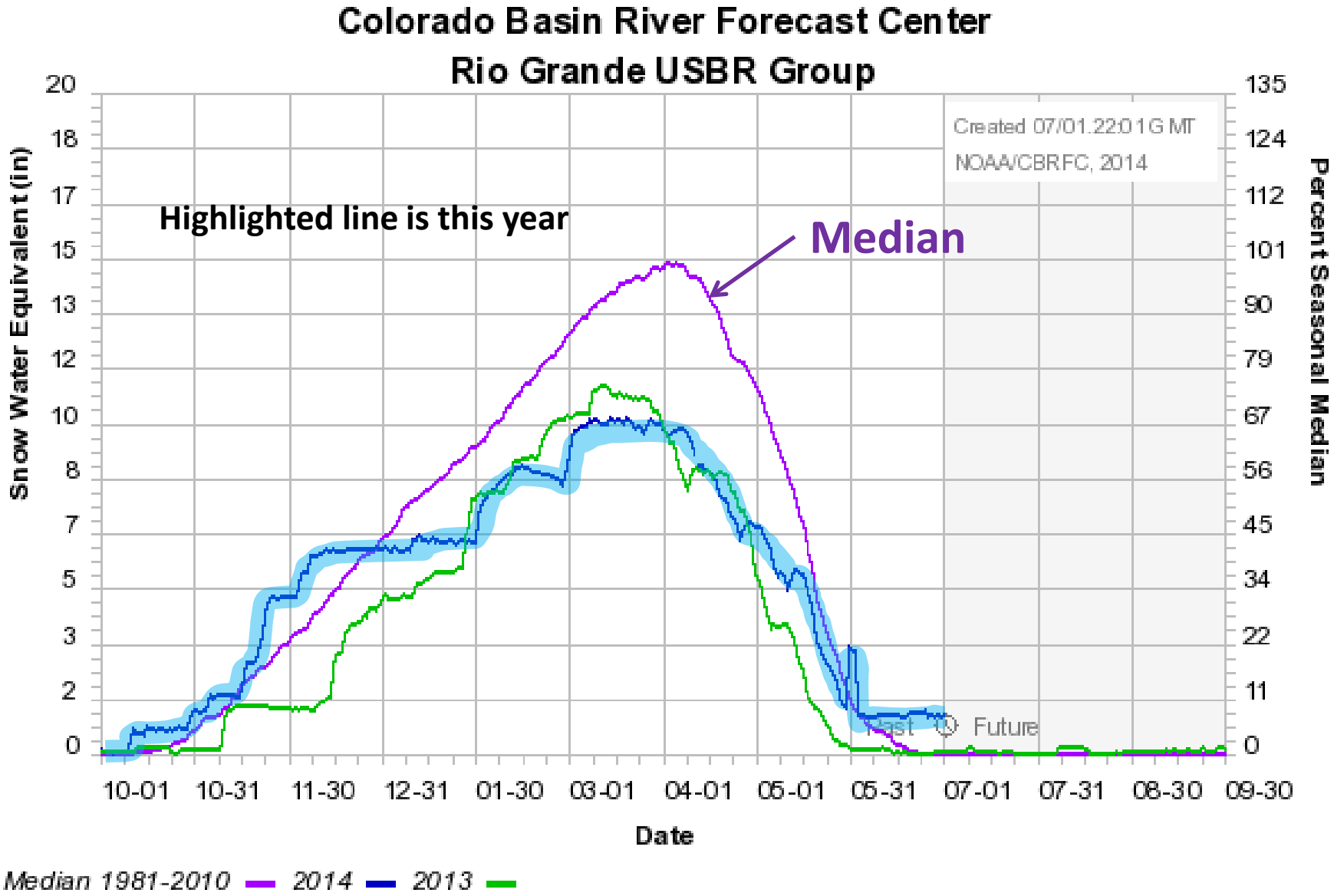
36 Month (June 2011 – May 2014)
NM Precipitation Rank (6th driest -9.20”)



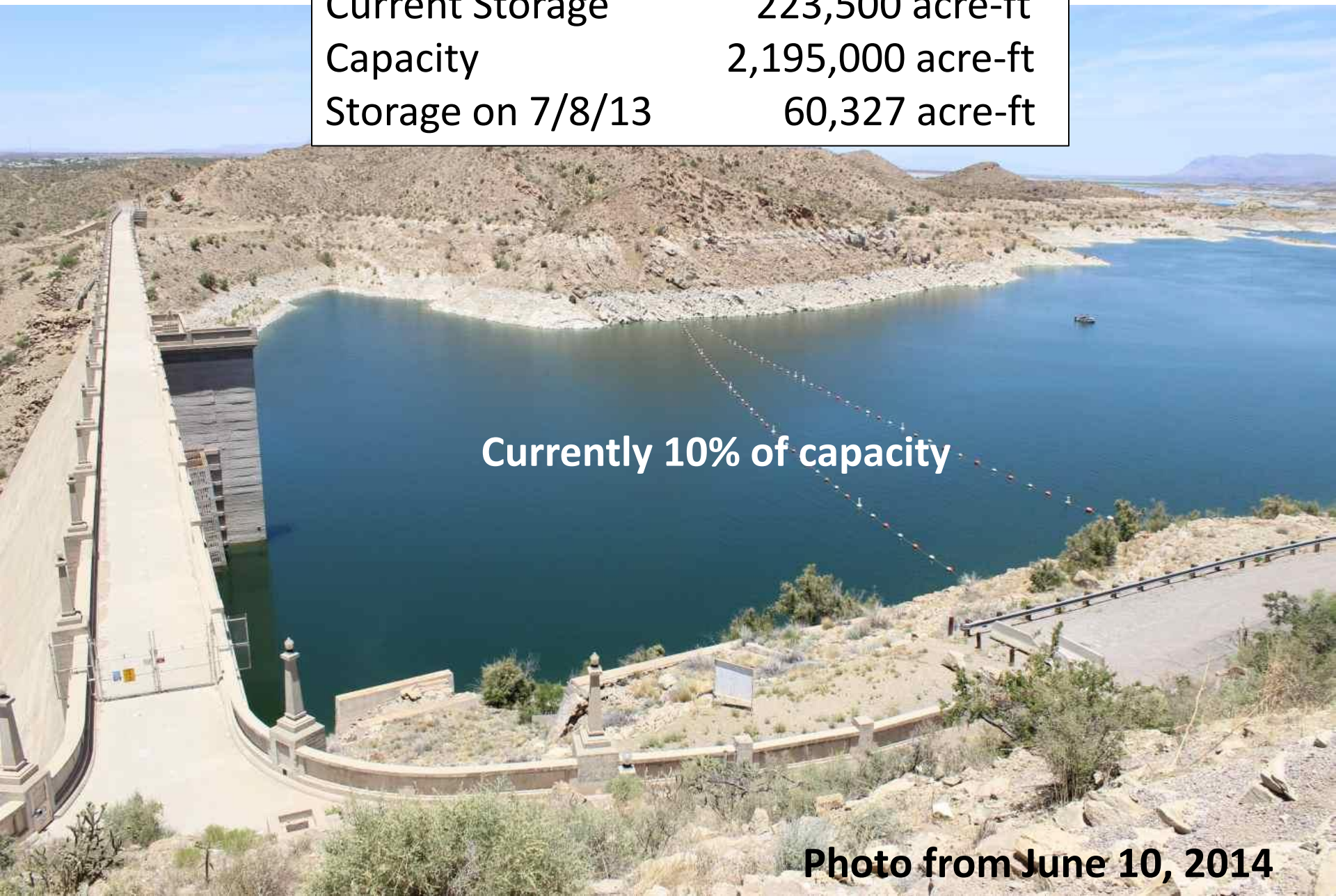
48 month: 5th driest…60 month: 7th driest


SLMC2
SCYC2
URGC2
BRTC2
MDLC2
WCSC2
USJC2
LPDC2
CHAN5
CUMC2
HPWN5
BAMN5
GLGN5
SENN5
QMZN5
WSSN5
Pueblo
Santa Fe
84
64
87
56
50
25
© 2013 Google
Image Landsat
Google earth

Rio Grande Basin Snow Observations

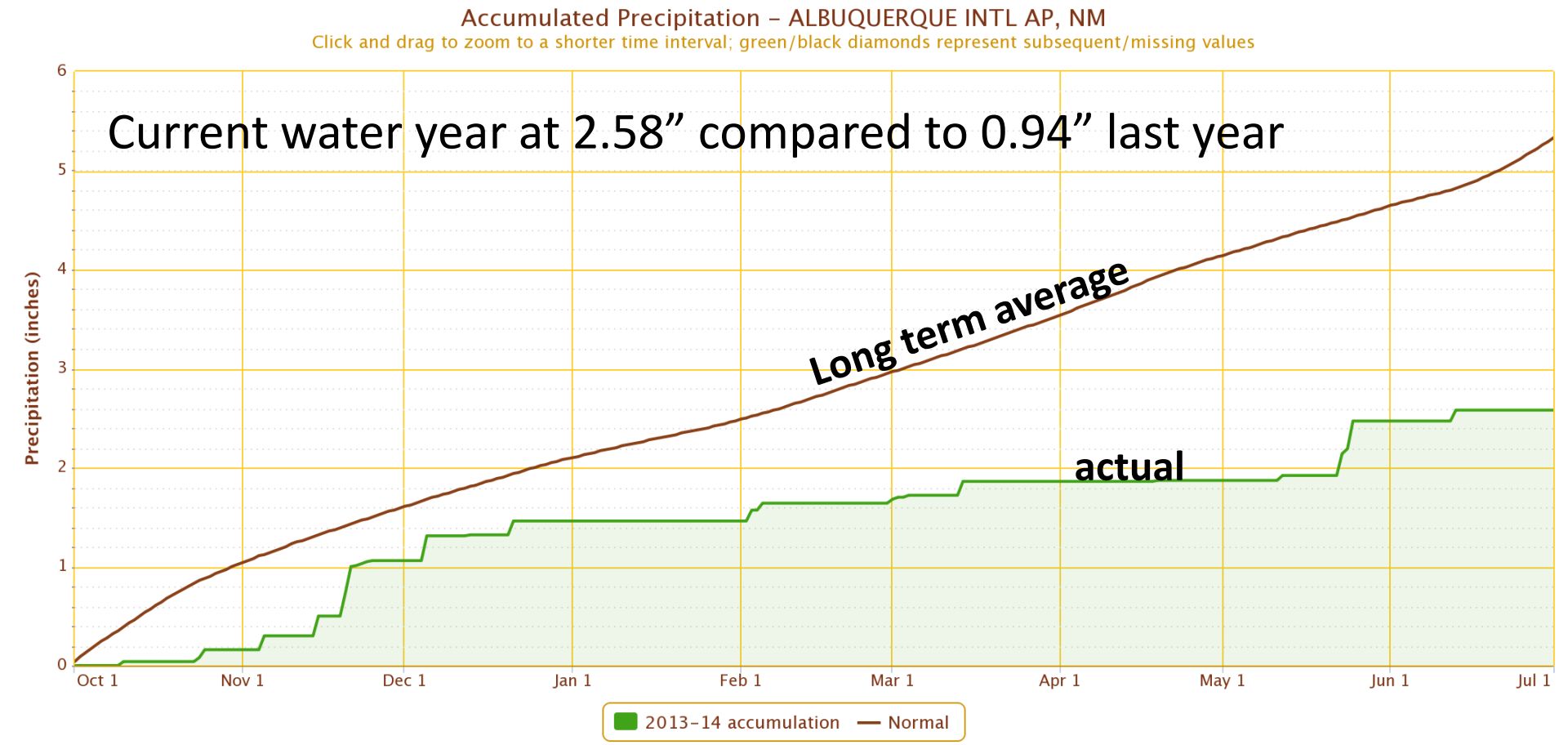


Elephant Butte as of 7/1/13	
Current Storage	223,500 acre-ft
Capacity	2,195,000 acre-ft
Storage on 7/8/13	60,327 acre-ft



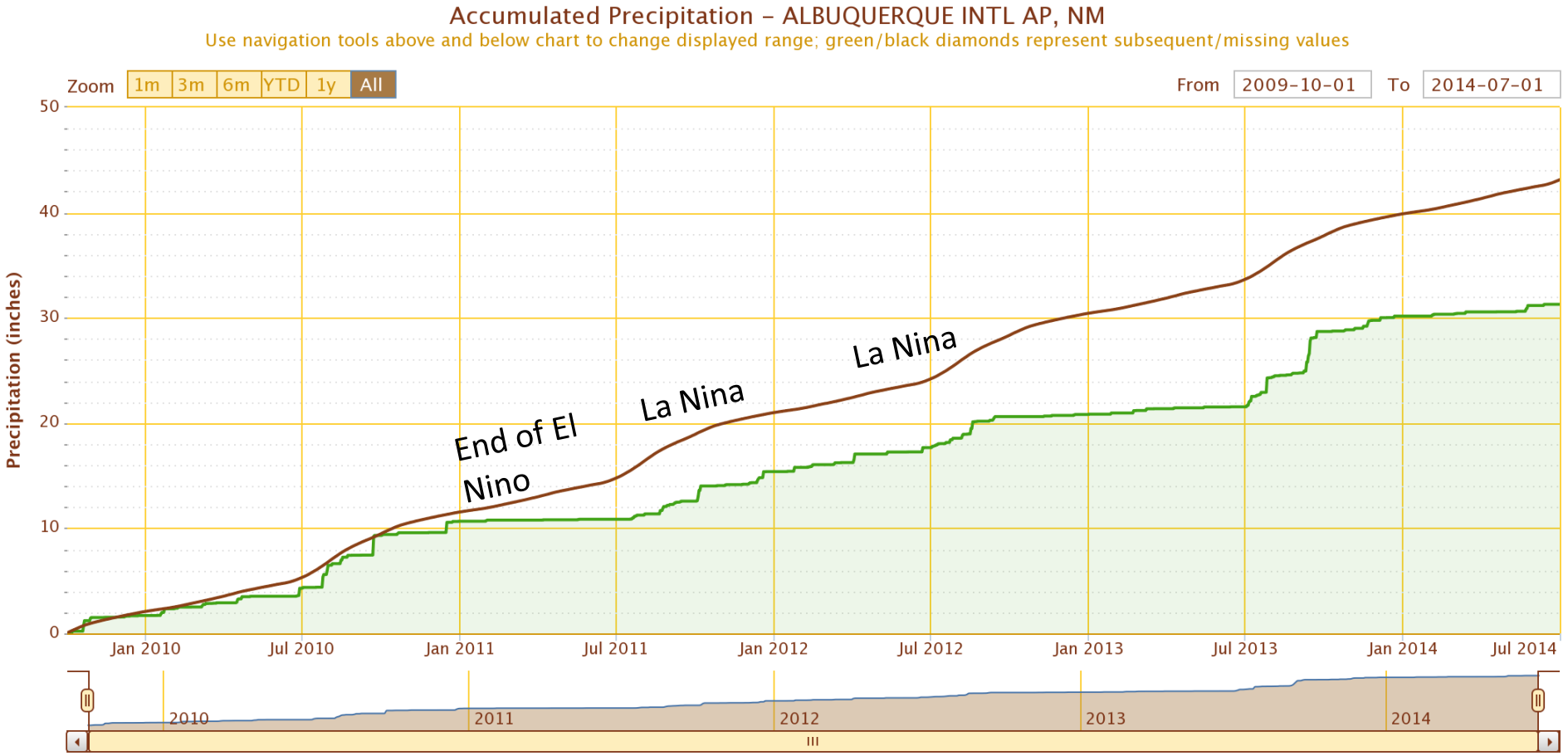
Albuquerque Sunport – Water Year 2014 Precipitation

- Water Year 48% of average

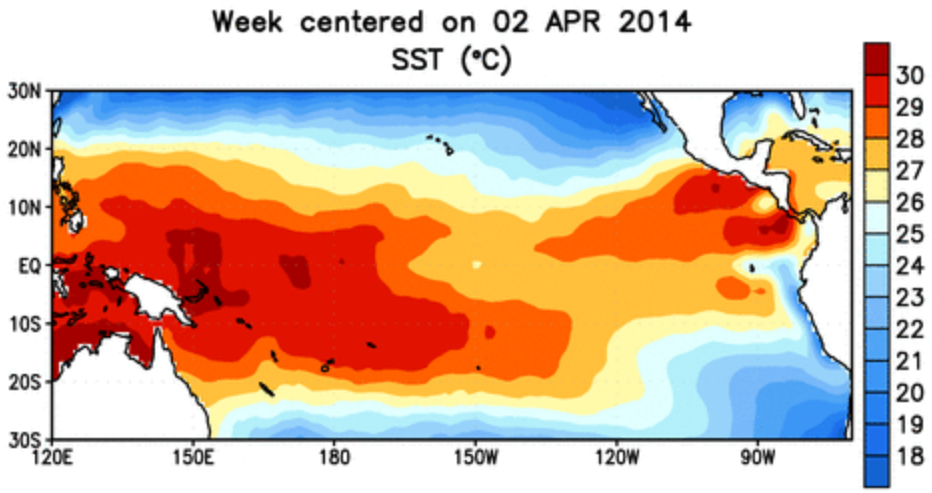


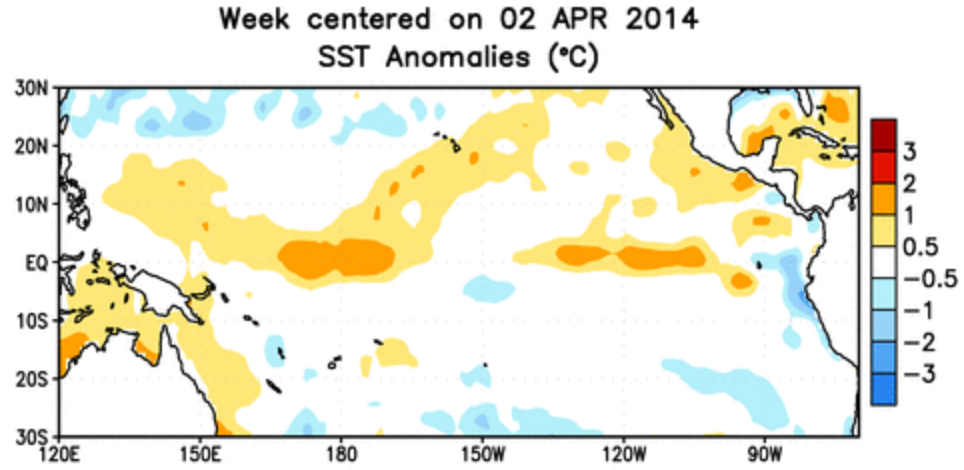
ABQ airport – accumulation of last 5 yrs

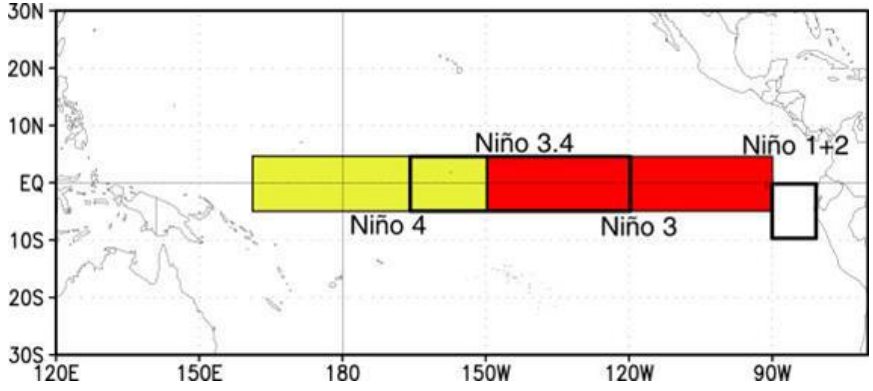
- Oct 2009 to June 2014
- 11.78” precipitation deficit over this period



3 Month Loop of Weekly SSTs/Anomallies

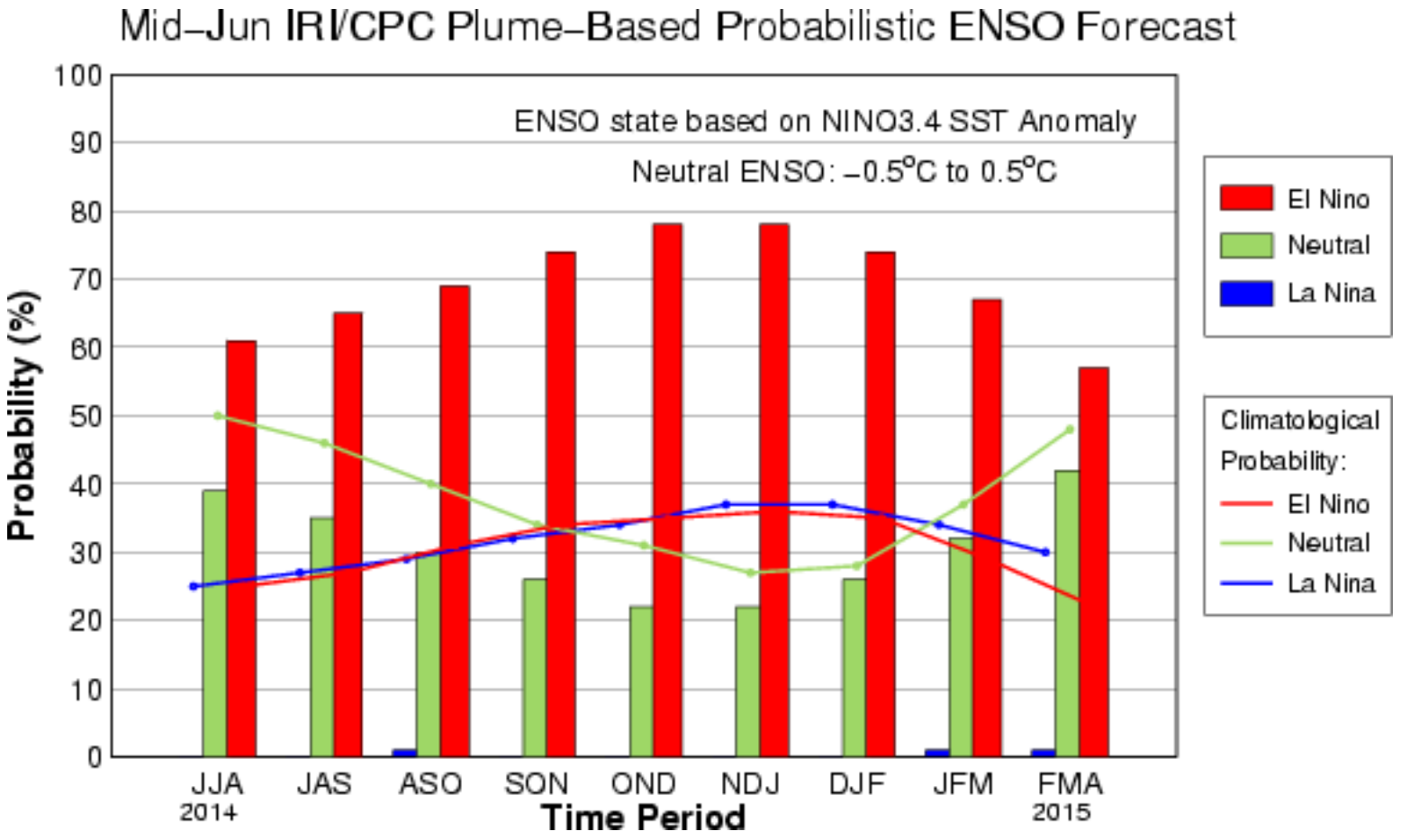






Seasonal Forecast

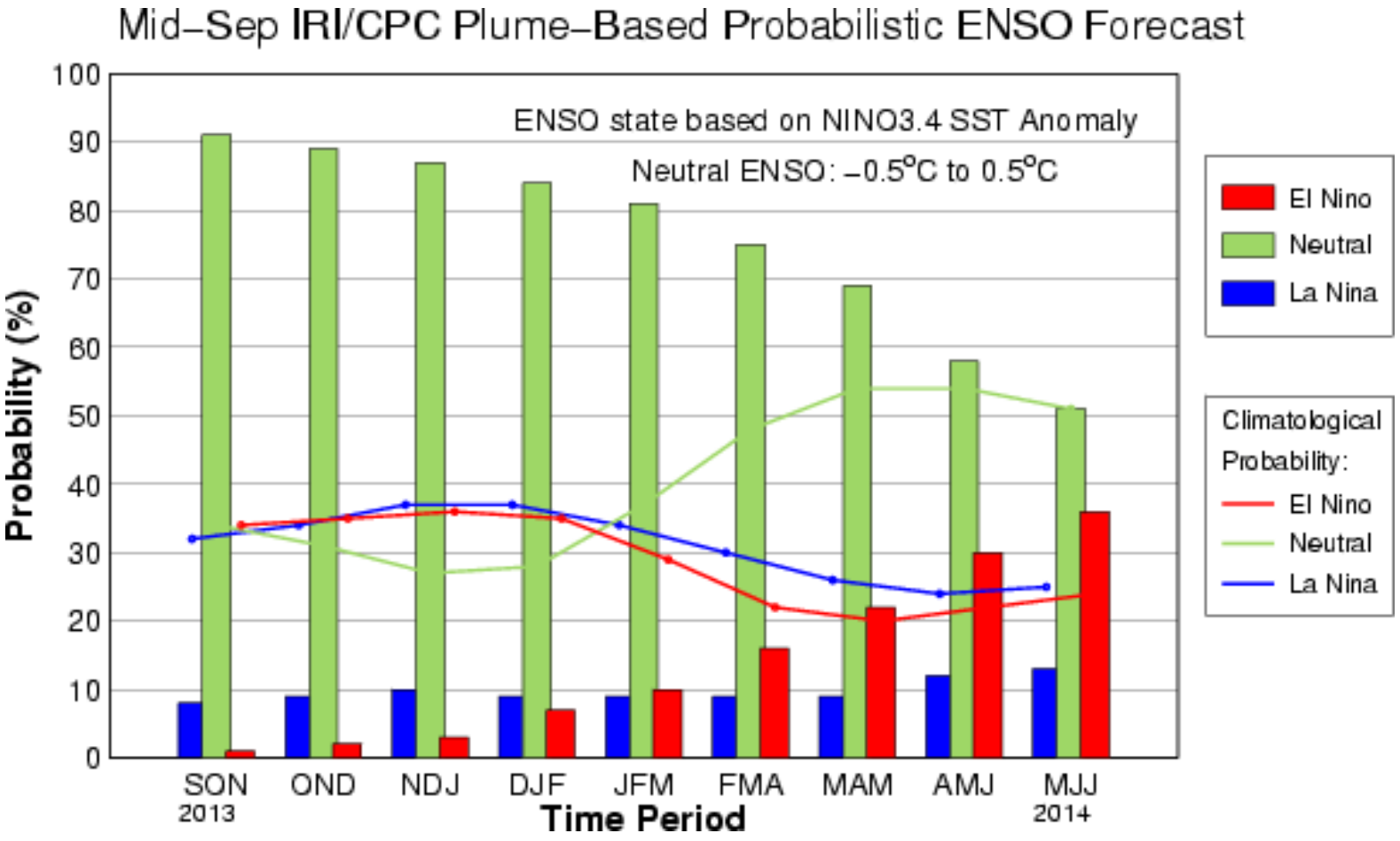
El Nino conditions likely starting this summer, continue thru winter



http://iri.columbia.edu/our-expertise/climate/forecasts/enso/

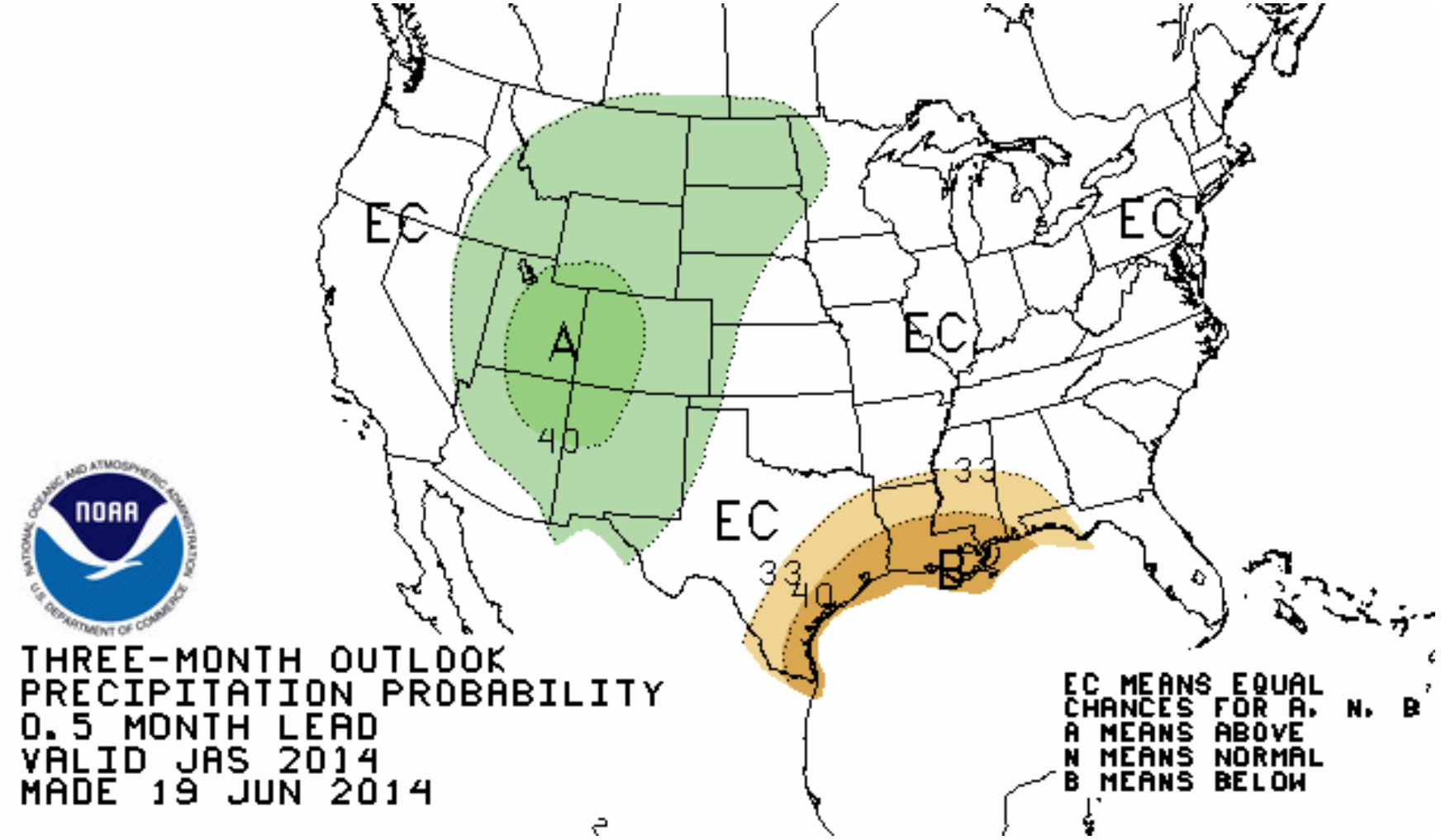
Last Year: Seasonal Forecast

Neutral ENSO conditions continued through 2013 and into 2014



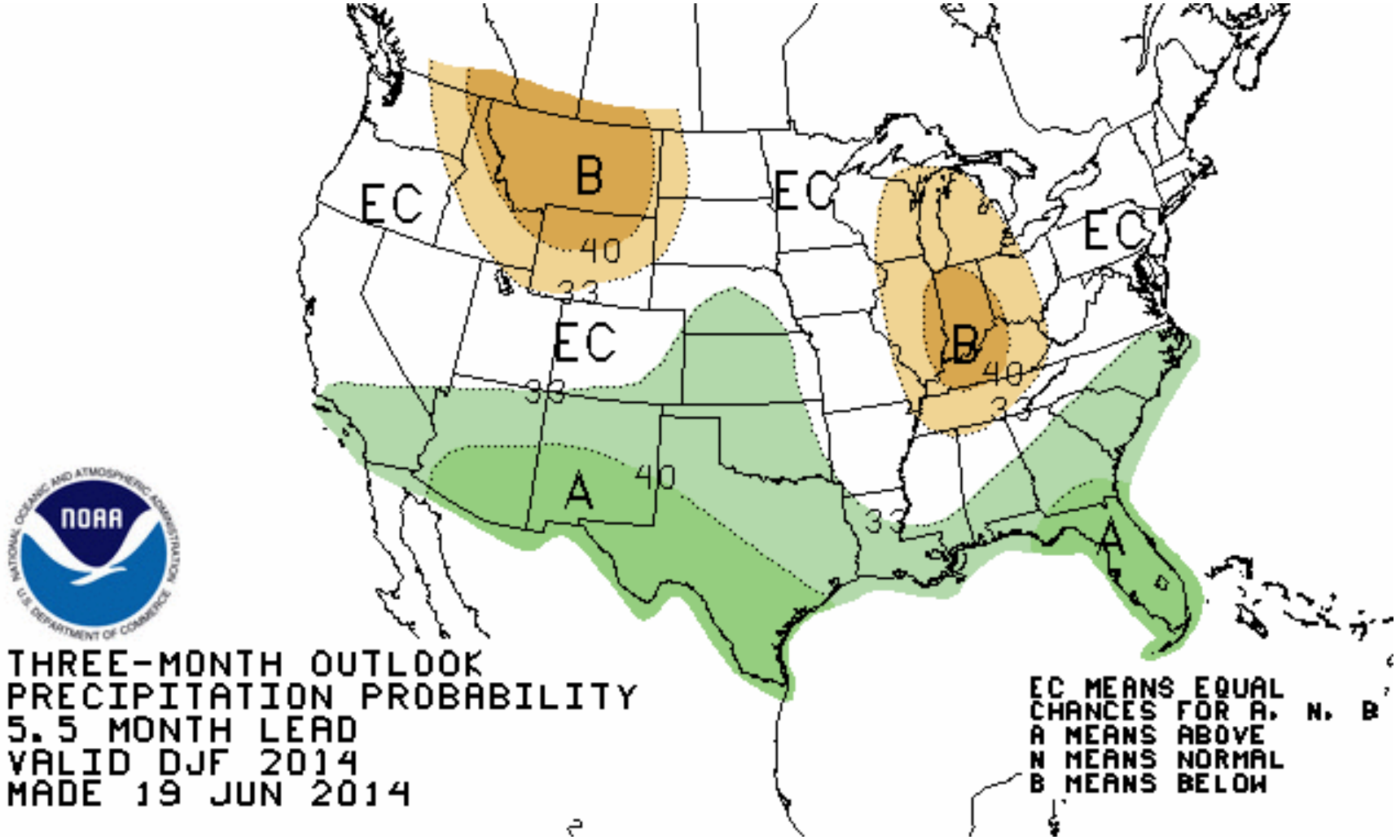
http://iri.columbia.edu/climate/ENSO/currentinfo/figure3.html

Summer Precipitation Outlook



http://www.cpc.ncep.noaa.gov/

Winter Precipitation Outlook



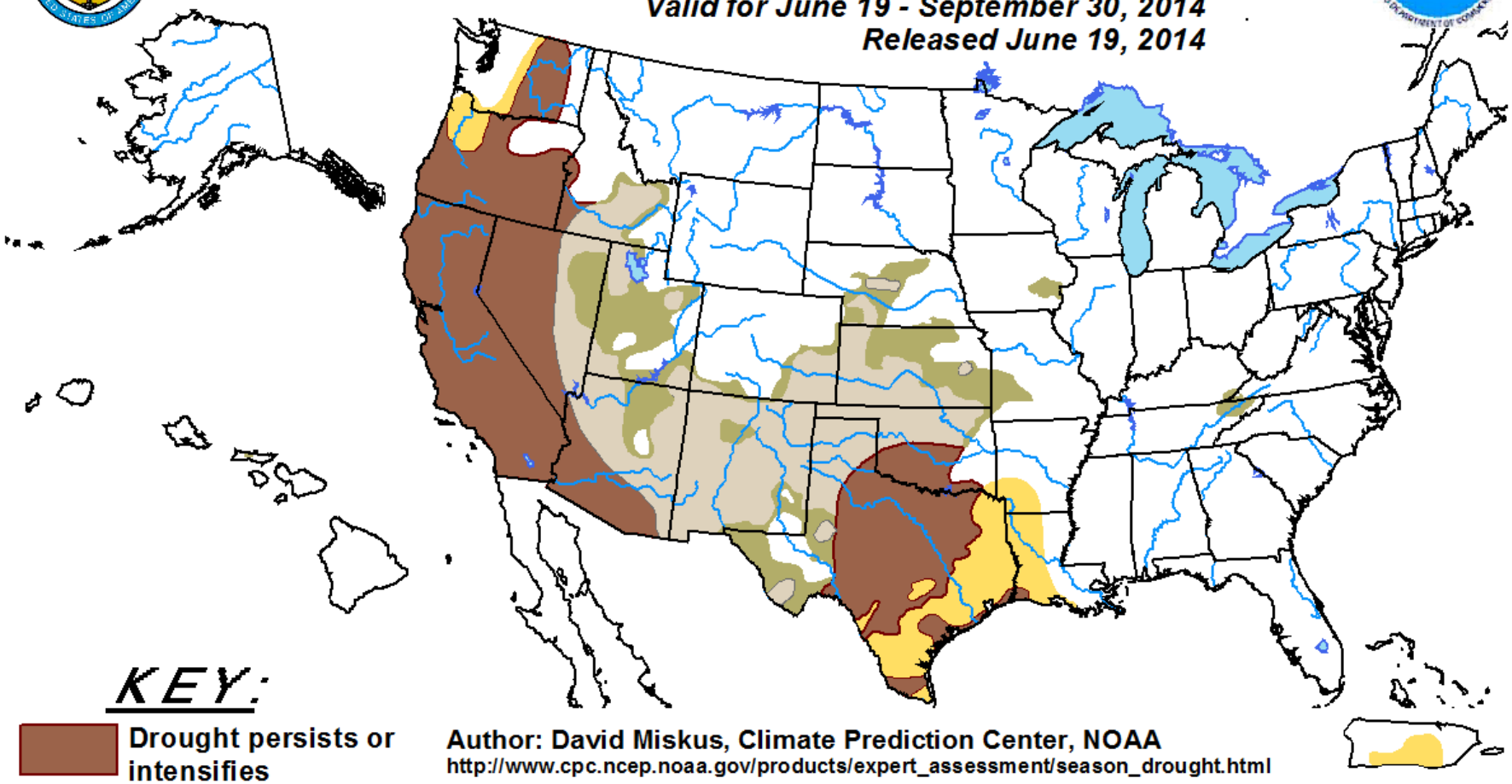
http://www.cpc.ncep.noaa.gov/products/predictions//multi_season/13_seasonal_outlooks/color/churchill.php

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for June 19 - September 30, 2014

Released June 19, 2014



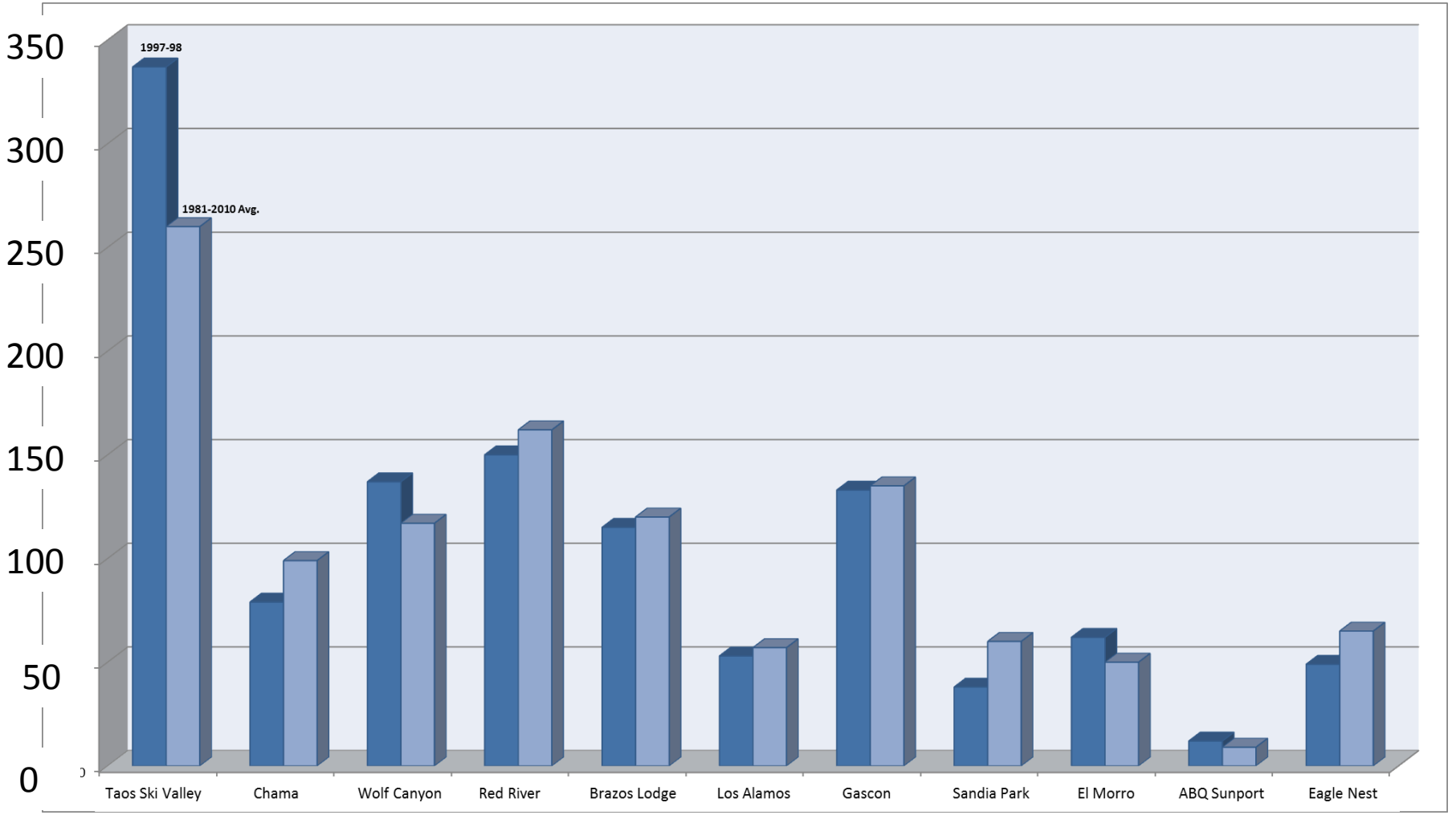
KEY:

- Drought persists or intensifies
- Drought remains but improves
- Drought removal likely
- Drought development likely

Author: David Miskus, Climate Prediction Center, NOAA
http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.html

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity).
For weekly drought updates, see the latest U.S. Drought Monitor.
NOTE: The tan area areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain.
The Green areas imply drought removal by the end of the period (D0 or none)

But Look Back at 1997-1998 Strong El Nino (October 1997–May 1998 Snowfall vs normal)



Courtesy Chuck Jones, National Weather Service, Albuquerque

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